

A randomised trial of simple excision of non-specific hypertrophied anal papillae versus expectant management in patients with chronic pruritus ani

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Summary

Forty-one patients with non-specific hypertrophied anal papillae and chronic idiopathic pruritus ani were randomly assigned to simple excision of the anal papillae ($n=21$) or expectant management ($n=20$). The patients were examined blindly 1 and 4 weeks after treatment and 1 year later. None of the patients were lost to follow-up. Of 21 patients treated with simple excision, 14 (67%) were symptom-free at 1 year after treatment compared to 11 out of 20 patients (55%) maintained on expectant management ($P>0.05$). It is concluded that simple excision of non-specific hypertrophied anal papillae is without effect on chronic idiopathic pruritus ani.

Introduction

It has been claimed that hypertrophied anal papillae are a frequent cause of pruritus ani and their removal has been advised on this account (1,2). However, the advice is not based on scientific data. The aim of the present study was to evaluate the effect of simple excision of anal papillae and of expectant management on pruritus ani in patients with non-specific hypertrophied anal papillae.

Methods

A total of 41 patients admitted to one of the outpatient clinics with their complaint of chronic pruritus ani, and in whom proctoscopy revealed one or more hypertrophied anal papillae, were enrolled into the study. Patients with secondary anal papillae due to anal fissures, haemorrhoids, or previous anorectal surgery were excluded. Patients in whom the hypertrophied anal papillae projected out of the anal orifice during straining and withdrawal of the proctoscope were also excluded. Informed consent was obtained from each patient.

The hypertrophied anal papillae were simply excised under local anaesthesia (1% lignocaine plus noradrenaline). The base of the papilla was ligated and the papilla excised. Subsequently the removed tissue was submitted to histological examination.

All patients were examined 1 and 4 weeks after excision or randomisation to expectant management. One year later they were assessed blindly again by a physician not aware of the type of initial treatment. None of the patients were lost to follow-up.

Between January 1980 and September 1986 41 patients entered the trial. Twenty-one patients were randomised to simple excision of the anal papillae and 20 patients to expectant management. All patients in both treatment groups were advised to follow our standard regimen for patients with anal irritation (3).

According to the proctological findings, patients were divided into four groups:

- 1 No macroscopical evidence of pruritus ani;
- 2 Reddened skin;
- 3 Ridged and oedematous skin; and
- 4 Coarse, white, ridged and oedematous skin.

At the follow-up visits 1 and 4 weeks after randomisation and treatment and 1 year later the following assessments of the patients were used:

- 1 Symptom-free;
- 2 Mild incapacity;
- 3 Moderate incapacity; and
- 4 Severe incapacity (off work).

The statistical methods were the Mann-Whitney *U* test and Fischer's exact probability test. Both tests were two-tailed with a significance level of 0.05.

Results

Table I demonstrates that there was no difference between the two treatment groups with regard to clinical characteristics, age, sex, duration of symptoms, macroscopical appearance of the perianal skin and number of anal papillae.

Of the 21 patients randomised to simple excision of their anal papillae 8 (42%) developed substantial anal pain within 1 week after the excision due to either an anal fissure ($n=3$), sphincter spasms ($n=4$), or infection ($n=1$) in contrast to zero out of the 20 patients maintained on expectant management (0%) ($P<0.01$).

Table II shows that out of 21 patients, 14 (67%) treated with excision were symptom-free at 1 year after treatment compared to 11 (55%) out of 20 patients randomised to expectant management ($P>0.05$). None of the patients in the two groups suffered from severe incapacity and the number of patients suffering from mild or moderate incapacity was the same in both treatment groups.

Table III shows the macroscopical changes in the pruritus ani at 1 month and 12 months after randomisation in the two treatment groups.

TABLE I Comparability of treatment groups

	Excision ($n=21$)	Expectant management ($n=20$)
Age (years)*	38 (27–60)	33 (24–66)
Men:women	14:7	10:10
Duration of pruritus ani* (months)	6 (0–24)	9 (3–18)
No. of anal papillae*	1 (1–4)	1 (1–3)
Appearance of the perianal skin:		
Normal	6	5
Reddened	11	9
Ridged, oedematous	4	5
Coarse, white, ridged and oedematous	0	1

* Medians and total ranges

TABLE II Assessment of pruritus ani in patients with hypertrophied anal papillae treated with either simple excision or expectant management 0, 1, and 12 months after randomisation

	Excision			Expectant management		
	0	1	12	0	1	12
Symptom free	0	2	14	0	4	11
Mild incapacity	4	7	3	2	5	6
Moderate incapacity	16	12	4	18	11	3
Severe incapacity	1	0	0	0	0	0

Discussion

These findings indicate that excision of non-specific hypertrophied anal papillae is of no help for patients with

TABLE III Macroscopic appearance of the perianal region in patients with chronic idiopathic pruritus ani and non-specific hypertrophied anal papillae 1 and 12 months after randomisation to expectant management ($n=20$) or simple excision of the anal papillae ($n=21$)

	Excision		Expectant management	
	1 month	12 months	1 month	12 months
Normal skin	8	12	6	12
Reddened skin	12	8	11	6
Ridged, oedematous skin	1	0	2	0
Coarse, white, ridged oedematous skin	0	1	1	2

chronic pruritus ani and may be considered harmful because it gives the patient unnecessary postoperative discomfort and leads to increased prevalence of acute anal fissures and spasms in the postoperative course.

These results differ from those published previously. (1,2). However, these studies were not controlled and they failed to separate between patients with first episode pruritus ani and recurrent pruritus ani. The length of previous pruritus ani may well play a decisive role in determining the chance of cure. After the present study it seems unlikely that anal papillae play any role in anal irritation unless they project out of the anus.

The present results are in agreement with Goligher's imperative conclusions on this subject (4).

In the trial reported here, in which patients were randomised to treatment with either excision or expectant management, we were able to show surprisingly high cure rates at the 1-year follow-up examination in both treatment groups. These high rates are probably caused by the use of our standard regimen for pruritus ani (3).

References

- 1 Wallis F. Pruritus ani. Practitioner 1911;87:413–19.
- 2 Nicholsson JD. Perianal dermatology. In: Goldberg SM, Gordon PH, Nivatson S eds. Essentials of anorectal surgery. Philadelphia, Toronto: Lippincott 1980;134:41.
- 3 Jensen SL, Harling H, Årseth-Hansen P, Tange G. Strategies in diagnosis and treatment of pruritus ani: a prospective controlled study. Dis Colon Rectum 1988 (in press).
- 4 Goligher JC. Surgery of the anus rectum and colon. 4th ed. London: Baillière Tindall, 1980.

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